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Unless specifically defined in this section, words or phrases used in this article shall be interpreted to give them the meaning they have in common usage and to give this article its most reasonable application. The following words, terms and phrases, when used in this article, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

Accessory structure means a structure which is on the same parcel of property as the principle structure and the use of which is incidental to the use of the principle structure (such as garages and storage sheds).

Appeal means a request for a review of the floodplain administrator's interpretation of any section of this article or a request for a variance.

Area of shallow flooding means a designated AO, AH or VO zone on the city's flood insurance rate map (FIRM) with a one-percent chance or greater annual chance of flooding to an average depth of one to three feet where a clearly defined channel does not exist, where the path of flooding is unpredictable, and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow.

Area of special flood hazard means the land in the floodplain within the city subject to a one-percent or greater chance of flooding in any given year. The area may be designated as zone A on the flood hazard boundary map (FHBM). After detailed rate-making has been completed in preparation for publication of the flood insurance rate map, zone A usually is refined into zones A, AE, AH, AO, A1-99, VO, V1-30, VE or V.

Base flood means the flooding having a one-percent chance of being equalled or exceeded in any given year.

Basement means any area of the building having its floor subgrade (below ground level) on all sides.

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Critical feature means an integral and readily identifiable part of a flood protection system, without which the flood protection provided by the entire system would be compromised.

Development means any manmade change in improved and unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or materials.

Elevated building means a nonbasement building (i) built, for a building in zones A1-30, AE, A, A99, AO, AH, B, C, X and D, to have the top of the elevated floor or, in for a building in zone V1-30, VE or V, to have the bottom of the lowest horizontal structure member of the elevated floor elevated above the ground level by means of pilings, columns (posts and piers) or shear walls parallel to the flow of the water and (ii) adequately anchored so as not to impair the structural integrity of the building during a flood of up to the magnitude of the base flood. In zones A1-30, AE, A, A99, AO, AH, B, C, X and D, the term "elevated building" also includes a building elevated by means of fill or solid foundation perimeter walls with openings sufficient to facilitate the unimpeded movement of floodwaters.

Existing construction means, for the purposes of determining rates, structures for which the start of construction commenced before the effective date of the flood insurance rate map, i.e. October 16, 1979. The term "existing construction" may also be referred to as "existing structures."

Existing manufactured home park or subdivision means a manufactured home park or subdivision for which the construction of facilities for servicing the lot on which the manufactured homes are to be affixed, including, at a minimum, the installation of utilities, either final site grading or the pouring of concrete pads, and the construction of streets, is completed before the effective date of floodplain management regulations adopted by a community.

Expansion to an existing manufactured home park or subdivision means the preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured homes are to be affixed, including the installation of utilities, either final site grading or pouring of concrete pads, or the construction of streets.

Flood and flooding mean a general and temporary condition of partial or complete inundation of normally dry land areas from the overflow of inland or tidal waters or the unusual and rapid accumulation or runoff of surface waters from any source.

Flood insurance rate map (FIRM) means an official map of the city on which the Federal Emergency Management Agency has delineated both the areas of special flood hazards and the risk premium zones applicable to the community.

Flood insurance study means the official report provided by the Federal Emergency Management Agency. The report contains flood profiles, water surface elevation of the base flood, as well as the flood boundary-floodway map.

Floodplain and floodprone area mean any land area susceptible to being inundated by water from any source. See the definition of *Flooding*.

Floodplain management means the operation of an overall program of corrective and preventive measures for reducing flood damage, including but not limited to emergency preparedness plans, flood control works and floodplain management regulations.

Floodplain management regulations means zoning ordinances; subdivision regulations; building codes; health regulations; special purpose ordinances, such as a floodplain ordinance, grading ordinance and erosion control ordinance; and other applications of police power. The term describes such state or local regulations, in any combination thereof, which provide standards for the purpose of flood damage prevention and reduction.

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Floodproofing means any combination of structural and nonstructural additions, changes or adjustments to structures which reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, structures and their contents.

Flood protection system means those physical structural works for which funds have been authorized, appropriated and expended and which have been constructed specifically to modify flooding in order to reduce the extent of the areas within a community subject to a special flood hazard and the extent of the depths of associated flooding. Such a system typically includes hurricane tidal barriers, dams, reservoirs, levees or dikes. These specialized flood-modifying works are those constructed in conformance with sound engineering standards.

Floodway and *regulatory floodway* mean the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height.

Functionally dependent use means a use which cannot perform its intended purpose unless it is located or carried out in close proximity to water. The term includes only docking facilities, port facilities that are necessary for the loading and unloading of cargo or passengers, and shipbuilding and ship repair facilities, but does not include longterm storage or related manufacturing facilities.

Highest adjacent grade means the highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure.

Historic structure means any structure that is:

- (1) Listed individually in the National Register of Historic Places (a listing maintained by the Department of the Interior) or preliminarily determined by the secretary of the interior as meeting the requirements for individual listing on the National Register;
- (2) Certified or preliminarily determined by the secretary of the interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the secretary to qualify as a registered historic district;
- (3) Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the secretary of the interior; or
- (4) Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either:
 - a. By an approved state program as determined by the secretary of the interior; or
 - b. Directly by the secretary of the interior in states without approved programs.

Levee means a manmade structure, usually an earthen embankment, designed and constructed in accordance with sound engineering practices to contain, control or divert the flow of water so as to provide protection from temporary flooding.

Levee system means a flood protection system which consists of a levee and associated structures, such as closure and drainage devices, which are constructed and operated in accordance with sound engineering practices.

Lowest floor means the lowest floor of the lowest enclosed area, including basement. An unfinished or flood-resistant enclosure, usable solely for parking of vehicles, building access or storage in an area other than a basement area, is not considered a building's lowest floor, provided that such enclosure is not built so as to render the structure in violation of the applicable nonelevation design requirement of section 60.3 of the National Flood Insurance Program regulations.

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Manufactured home means a structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when connected to the required utilities. The term "manufactured home" does not include a recreational vehicle, but includes a mobile home.

Manufactured home park or subdivision means a parcel or contiguous parcels of land divided into two or more manufactured home lots for rent or sale.

Mean sea level means, for purposes of the National Flood Insurance Program, the National Geodetic Vertical Datum (NGVD) of 1929 or other datum, to which base flood elevations shown on a community's flood insurance rate map are referenced.

New construction means, for the purpose of determining insurance rates, structures for which the start of construction commenced on or after the effective date of an initial flood insurance rate map or after December 31, 1974, whichever is later, and includes any subsequent improvements to such structures. For floodplain management purposes, the term "new construction" means structures for which the start of construction commenced on or after the effective date of a floodplain management regulation adopted by a community and includes any subsequent improvements to such structures.

New manufactured home park or subdivision means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed, including at a minimum the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads, is completed on or after the effective date of floodplain management regulations adopted by a community.

Recreational vehicle means a vehicle which is:

- (1) Built on a single chassis;
- (2) Four hundred square feet or less when measured at the largest horizontal projections;
- (3) Designed to be self-propelled or permanently towable by a light-duty truck; and
- (4) Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel or seasonal use.

Start of construction, for other than new construction or substantial improvements under the Coastal Barrier Resources Act (PL 97-340), includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition, placement or other improvement was within 180 days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slabs or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for basements, footings, piers or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

Structure means a walled and roofed building, including a gas or liquid storage tank, that is principally above ground, as well as a manufactured home.

Substantial damage means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before-damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.

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Substantial improvement means any reconstruction, rehabilitation, addition or other improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure before the start of construction of the improvement. This term includes structures which have incurred substantial damage, regardless of the actual repair work performed. The term does not, however, include either:

- (1) Any project for improvement of a structure to correct existing violations of state or local health, sanitary or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to ensure safe living conditions; or
- (2) Any alteration of a historic structure, provided that the alteration will not preclude the structure's continued designation as a historic structure.

Variance means a grant of relief to a person from the requirements of this article when specific enforcement would result in unnecessary hardship. A variance, therefore, permits construction or development in a manner otherwise prohibited by this article. For full requirements see section 60.6 of the National Flood Insurance Program regulations.

Violation means the failure of a structure or other development to be fully compliant with the community's floodplain management regulations. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in section 60.3(b)(5), (c)(4), (c)(10), (d)(3), (e)(2), (e)(4), or (e)(5) of the National Flood Insurance Program regulations is presumed to be in violation until such time as that documentation is provided.

Water surface elevation means the height, in relation to the National Geodetic Vertical Datum (NGVD) of 1929 or other datum, where specified, of floods of various magnitudes and frequencies in the floodplains of coastal or riverine areas.

(Code 1966, § 15½-16; Ord. No. 101-2005, § 1, 12-6-2005)

Cross reference— Definitions generally, § 1-2.

Sec. 54-27. - Statutory authorization.

The state legislature has in V.T.C.A., Water Code § 16.311 et seq., delegated the responsibility to local governmental units to adopt regulations designed to minimize flood losses. Therefore, the city council ordains this article.

(Code 1966, § 15½-1)

Sec. 54-28. - Findings of fact.

- (a) The flood hazard areas of the city are subject to periodic inundation which results in loss of life and property, health and safety hazards, disruption of commerce and governmental services, and extraordinary public expenditures for flood protection and relief, all of which adversely affect the public health, safety and general welfare.
- (b) These flood losses are created by the cumulative effect of obstructions in floodplains which cause an increase in flood heights and velocities, and by the occupancy of flood hazard areas by uses vulnerable to floods and hazardous to other lands because they are inadequately elevated, floodproofed, or otherwise protected from flood damage.

(Code 1966, § 15½-2)

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Sec. 54-29. - Statement of purpose.

It is the purpose of this article to promote the public health, safety and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:

- (1) Protect human life and health;
- (2) Minimize expenditure of public money for costly flood control projects;
- (3) Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
- (4) Minimize prolonged business interruptions;
- (5) Minimize damage to public facilities and utilities such as water and gas mains; electric, telephone and sewer lines; streets; and bridges located in floodplains;
- (6) Help maintain a stable tax base by providing for the sound use and development of floodprone areas in such a manner as to minimize future flood blight areas; and
- (7) Ensure that potential buyers are notified that property is in a flood area.

(Code 1966, § 15½-3)

Sec. 54-30. - Lands to which article applies.

This article shall apply to all areas of special flood hazard within the jurisdiction of the city.

(Code 1966, § 15½-27)

Sec. 54-31. - Basis for establishing areas of special flood hazard.

The areas of special flood hazard identified by the Federal Emergency Management Agency in a scientific and engineering report entitled "Flood Insurance Study (FIS)" and accompanying flood insurance rate map which is effective January 19, 2000, and any revisions thereto are adopted by reference and declared to be a part of this article.

(Code 1966, § 15½-28)

Sec. 54-32. - Compliance.

No structure or land shall be located, altered or have its use changed without full compliance with the terms of this article and other applicable regulations.

(Code 1966, § 15½-30)

Sec. 54-33. - Abrogation and greater restrictions.

This article is not intended to repeal, abrogate or impair any existing easements, covenants or deed restrictions. However, where this article and another ordinance conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

(Code 1966, § 15½-31)

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Sec. 54-34. - Interpretation.

In the interpretation and application of this article, all sections shall be:

- (1) Considered as minimum requirements;
- (2) Liberally construed in favor of the city council; and
- (3) Deemed neither to limit nor repeal any other powers granted under state statutes.

(Code 1966, § 15½-32)

Sec. 54-35. - Warning and disclaimer of liability.

The degree of flood protection required by this article is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. On rare occasions greater floods can and will occur, and flood heights may be increased by manmade or natural causes. This article does not imply that land outside the areas of special flood hazards or uses permitted within such areas will be free from flooding or flood damages. This article shall not create liability on the part of the community or any official or employee thereof for any flood damages that result from reliance on this article or any administrative decision lawfully made thereunder.

(Code 1966, § 15½-33)

Sec. 54-36. - Methods of reducing flood losses.

In order to accomplish its purposes, this article uses the following methods:

- (1) Restrict or prohibit uses that are dangerous to health, safety or property in times of flood, or that cause excessive increases in flood heights or velocities.
- (2) Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction.
- (3) Control the alteration of natural floodplains, stream channels and natural protective barriers which are involved in the accommodation of floodwaters.
- (4) Control filling, grading, dredging and other development which may increase flood damage.
- (5) Prevent or regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands.

(Code 1966, § 15½-4)

Secs. 54-37—54-60. - Reserved.

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Sec. 54-61. - Designation of floodplain administrator.

The director of the department of public works is appointed the floodplain administrator to administer and implement this article and other appropriate sections of [44](#) CFR (National Flood Insurance Program regulations) pertaining to floodplain management.

(Code 1966, § 15½-44; Ord. No. 15-2012, § 1, 3-20-2012)

Sec. 54-62. - Duties and responsibilities of floodplain administrator.

Duties and responsibilities of the floodplain administrator shall include but not be limited to the following:

- (1) Maintain and hold open for public inspection all records pertaining to this article.
- (2) Review permit applications to determine whether proposed building sites will be reasonably safe from flooding.
- (3) Review, approve or deny all applications for development permits required by adoption of this article.
- (4) Review permits for proposed development to ensure that all necessary permits have been obtained from those federal, state or local governmental agencies, including section 404 of the Federal Water Pollution Control Act Amendments of 1972 (33 USC 1334) from which prior approval is required.
- (5) Where interpretation is needed as to the exact location of the boundaries of the areas of special flood hazards (for example, where there appears to be a conflict between a mapped boundary and actual field conditions), the floodplain administrator shall make the necessary interpretation.
- (6) Notify, in riverine situations, adjacent communities and the state coordinating agencies prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Emergency Management Agency.
- (7) Ensure that the flood-carrying capacity within the altered or relocated portion of any watercourse is maintained.

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- (8) When base flood elevation data has not been provided in accordance with [section 54-31](#), the floodplain administrator shall obtain, review and reasonably utilize any base flood elevation data and floodway data available from a federal, state or other source, in order to administer division 3 of this article.
- (9) When a regulatory floodway has not been designated, the floodplain administrator must require that no new construction, substantial improvements, or other development, including fill, shall be permitted within zones A1-30 and AE on the community's flood insurance rate map unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point within the community.
- (10) Under the provisions of [44 CFR chapter 1](#), section 65.12, of the National Flood Insurance Program regulations, a community may approve certain development in zones A1-30, AE, AH on the community's flood insurance rate map which increases the water surface elevation of the base flood by more than one foot, provided that the community first applies for a conditional flood insurance rate map revision through the Federal Emergency Management Agency.

(Code 1966, § 15½-45; Ord. No. 15-2012, § 1, 3-20-2012)

Sec. 54-63. - Establishment of development permit.

A floodplain development permit shall be required to ensure conformance with this article.

(Code 1966, § 15½-29)

Sec. 54-64. - Permit procedures.

- (a) Application for a floodplain development permit shall be presented to the floodplain administrator on forms furnished by him and include but not be limited to plans in duplicate drawn to scale showing the location, dimensions and elevation of proposed landscape alterations; existing and proposed structures; and the location of such in relation to areas of special flood hazard. Additionally, the following information is required:
 - (1) Elevation, in relation to mean sea level, of the lowest floor, including basement, of all new and substantially improved structures.
 - (2) Elevation, in relation to mean sea level, to which any nonresidential structure shall be floodproofed.
 - (3) A certificate from a registered professional engineer or architect that the nonresidential floodproofed structure shall meet the floodproofing criteria of subsection [54-92\(2\)](#).
 - (4) Description of the extent to which any watercourse or natural drainage will be altered or relocated as a result of proposed development.
 - (5) Maintain a record of all such information in accordance with subsection [54-62\(1\)](#).
- (b) Approval or denial of a floodplain development permit by the floodplain administrator shall be based on all of the sections of this article and the following relevant factors:
 - (1) The danger to life and property due to flooding or erosion damage.
 - (2) The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner.

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- (3) The danger that materials may be swept onto other lands to the injury of others.
 - (4) The compatibility of the proposed use with existing and anticipated development.
 - (5) The safety of access to the property in times of flood for ordinary and emergency vehicles.
 - (6) The costs of providing governmental services during and after flood conditions, including maintenance and repair of streets and bridges, and public utilities and facilities such as sewer, gas, electrical and water systems.
 - (7) The expected heights, velocity, duration, rate of rise and sediment transport of the floodwaters and the effects of wave action, if applicable, expected at the site.
 - (8) The necessity to the facility of a waterfront location, where applicable.
 - (9) The availability of alternative locations, not subject to flooding or erosion damage, for the proposed use.
 - (10) The relationship of the proposed use to the comprehensive plan for that area.
- (c) Fees for a floodplain development permit shall be as provided by separate ordinance.
- (Code 1966, § 15½-46; Ord. No. 15-2012, § 1, 3-20-2012)

Sec. 54-65. - Variance procedures.

- (a) The zoning board of adjustment shall hear and render judgment on requests for variances from the requirements of this article.
- (b) The zoning board of adjustment shall hear and render judgment on an appeal only when it is alleged there is an error in any requirement, decision or determination made by the floodplain administrator in the enforcement or administration of this article.
- (c) Any person aggrieved by the decision of the zoning board of adjustment may appeal such decision in the courts of competent jurisdiction.
- (d) The floodplain administrator shall maintain a record of all actions involving an appeal and shall report variances to the Federal Emergency Management Agency upon request.
- (e) Variances may be issued for the reconstruction, rehabilitation or restoration of structures listed on the National Register of Historic Places or the state inventory of historic places, without regard to the procedures set forth in the remainder of this article.
- (f) Variances may be issued for new construction and substantial improvements to be erected on a lot one-half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, providing the relevant factors in subsection (b) of [section 54-64](#) have been fully considered. As the lot size increases beyond one-half acre, the technical justification required for issuing the variance increases.
- (g) Upon consideration of the factors noted in and the intent of this article, the zoning board of adjustment may attach such conditions to the granting of variances as it deems necessary to further the purpose and objectives of this article in [section 54-29](#)
- (h) Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result.
- (i) Variances may be issued for the repair or rehabilitation of historic structures upon a determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as a

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historic structure and the variance is the minimum necessary to preserve the historic character and design of the structure.

- (j) Prerequisites for granting variances shall be as follows:
- (1) Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
 - (2) Variances shall only be issued upon:
 - a. Showing a good and sufficient cause;
 - b. A determination that failure to grant the variance would result in exceptional hardship to the applicant; and
 - c. A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety or extraordinary public expense; create nuisances; cause fraud on or victimization of the public; or conflict with existing local laws or ordinances.
 - (3) Any applicant to whom a variance is granted shall be given written notice that the structure will be permitted to be built with the lowest floor elevation below the base flood elevation, and that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation.
- (k) Variances may be issued by the city for new construction and substantial improvements and for other development necessary for the conduct of a functionally dependent use, provided that the criteria outlined in subsections (a) through (j) of this section are met and the structure or other development is protected by methods that minimize flood damages during the base flood and create no additional threats to public safety.
- (l) Each application for a variance shall be accompanied by a variance application fee as set out in the zoning ordinance in Appendix B to this volume, as amended.

(Code 1966, § 15½-47; Ord. No. 15-2012, § 1, 3-20-2012)

Sec. 54-66. - Penalty for violation.

If any individual, including any officer, agent or employee acting in behalf of any individual, firm, association or corporation, violates any section of this article within the corporate city limits, he shall be guilty of a misdemeanor and, upon conviction of such violation in the municipal court, he shall be fined as provided in [section 1-14](#). Each day that such violation continues shall be a separate offense. Prosecution or conviction under this section shall never be a bar to any other remedy or relief for violations of this article.

(Code 1966, § 15½-48)

Secs. 54-67—54-90. - Reserved.

FOOTNOTE(S):

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⁽⁷⁷⁾ **Cross reference**— Administration, ch. 2. [\(Back\)](#)

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[Sec. 54-94. - Areas of shallow flooding \(AO/AH zones\).](#)

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Sec. 54-91. - General standards.

In all areas of special flood hazards, the following are required for all new construction and substantial improvements:

- (1) All new construction or substantial improvements shall be designed or modified and adequately anchored to prevent flotation, collapse or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy.
- (2) All new construction or substantial improvements shall be constructed by methods and practices that minimize flood damage.
- (3) All new construction or substantial improvements shall be constructed with materials resistant to flood damage.
- (4) All new construction or substantial improvements shall be constructed with electrical, heating, ventilation, plumbing and air conditioning equipment and other service facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding.
- (5) All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system.
- (6) New and replacement sanitary sewer systems shall be designed to minimize or eliminate infiltration of floodwaters into the systems and discharge from the systems into floodwaters.
- (7) On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

(Code 1966, § 15½-59)

Sec. 54-92. - Specific standards.

In all areas of special flood hazards where base flood elevation data has been provided as set forth in [section 54-31](#), subsection [54-62](#)(8), or subsection [54-93](#)(d), the following are required:

- (1) *Residential construction.* New construction and substantial improvement of any residential structure shall have the lowest floor, including basement, elevated one foot or more above the base flood elevation. A registered professional engineer, architect or land surveyor shall submit a certification to the floodplain administrator that the standard of this subsection, as proposed in [section 54-62](#), is satisfied.

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- (2) *Nonresidential construction.* New construction and substantial improvements of any commercial, industrial or other nonresidential structure shall either have the lowest floor, including basement, elevated one foot or more above the base flood elevation or, together with attendant utility and sanitary facilities, be floodproofed to at least one foot above the base flood elevation so that below the floodproofed elevation the structure is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. A registered professional engineer or architect shall develop and/or review structural design, specifications, and plans for the construction, and shall certify that the design and methods of construction are in accordance with accepted standards of practice as outlined in this subsection. A record of such certification, which includes the specific elevation, in relation to mean sea level, to which such structures are floodproofed, shall be maintained by the floodplain administrator.
- (3) *Enclosures.* New construction and substantial improvements, with fully enclosed areas below the lowest floor that are usable solely for parking of vehicles, building access or storage in an area other than a basement and which are subject to flooding, shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or meet or exceed the following minimum criteria:
- a. A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided.
 - b. The bottom of all openings shall be no higher than one foot above grade.
 - c. Openings may be equipped with screens, louvers, valves, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.
- (4) *Manufactured homes.* Standards for manufactured homes shall be as follows:
- a. Require that all manufactured homes to be placed within zone A on a community's flood insurance rate map shall be installed using methods and practices which minimize flood damage. For the purpose of this subsection, manufactured homes must be elevated and anchored to resist flotation, collapse or lateral movement. Methods of anchoring may include but are not limited to use of over-the-top or frame ties to ground anchors. This is in addition to applicable state and local anchoring requirements for resisting wind forces.
 - b. Require that manufactured homes that are placed or substantially improved within zones A1-30, AH and AE on the community's flood insurance rate map on sites (i) outside of a manufactured home park or subdivision, (ii) in a new manufactured home park or subdivision, (iii) in an expansion to an existing manufactured home park or subdivision, or (iv) in an existing manufactured home park or subdivision on which a manufactured home has incurred substantial damage as a result of a flood be elevated on a permanent foundation such that the lowest floor of the manufactured home is elevated one foot or above the base flood elevation and be securely anchored to an adequately anchored foundation system to resist flotation, collapse and lateral movement.
 - c. Require that manufactured homes to be placed or substantially improved on sites in an existing manufactured home park or subdivision within zones A1-30, AH and AE on the community's flood insurance rate map that are not subject to this subsection be elevated so that either:
 - 1. The lowest floor of the manufactured home is one foot or more above the base flood elevation; or

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2. The manufactured home chassis is supported by reinforced piers or other foundation elements of at least equivalent strength that are no less than 36 inches in height above grade and shall be securely anchored to an adequately anchored foundation system to resist flotation, collapse and lateral movement.
- (5) *Recreational vehicles.* Require that recreational vehicles placed on sites within zones A1-30, AH and AE on the community's flood insurance rate map shall either (i) be on the site for fewer than 180 consecutive days; (ii) be fully licensed and ready for highway use; or (iii) meet the permit requirements of subsection [54-64](#)(a) and the elevation and anchoring requirements for manufactured homes in subsection (4) of this section. A recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick-disconnect-type utilities and security devices, and has no permanently attached additions.
- (6) *Accessory structures.* Accessory structures may be built below one foot above the base flood elevation provided that such structures satisfy the following standards in unnumbered and numbered A zones:
 - a. Structure is low valued and represents a minimal investment.
 - b. Structure shall be small in size, not to exceed 600 square feet.
 - c. Structure shall be unfinished on the interior.
 - d. Structure can be used only for parking and limited storage.
 - e. Structure shall not be used for human habitation (including work, sleeping, living, cooking, or restroom areas).
 - f. Service facilities such as electrical and heating equipment must be elevated to one foot above the BFE or floodproofed.
 - g. Structure is constructed and placed on building site so as to offer the minimum resistance to the flow of floodwaters.
 - h. Structure is designed to have low flood damage potential i.e. constructed with flood resistance materials.
 - i. Structure is firmly anchored to prevent floatation, collapse, and lateral movement.
 - j. Floodway requirements must be met in the construction of the structure.
 - k. Openings to relieve hydrostatic pressure during a flood shall be provided below one foot above the BFE.

(Code 1966, § 15½-60; Ord. No. 101-2005, § 2, 12-6-2005; Ord. No. 22-2012, § 1, 4-17-2012)

Sec. 54-93. - Subdivision proposals.

- (a) All subdivision proposals, including manufactured home parks and subdivisions, shall be consistent with sections [54-28](#), [54-29](#) and [54-36](#)
- (b) All proposals for the development of subdivisions, including manufactured home parks and subdivisions, shall meet development permit requirements of [section 54-64](#) and this division.
- (c) Base flood elevation data shall be generated for subdivision proposals and other proposed development, including manufactured home parks and subdivisions, which is greater than 50 lots or five acres, whichever is lesser, if not otherwise provided pursuant to [section 54-31](#) or subsection [54-62](#)(8).

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- (d) All subdivision proposals, including manufactured home parks and subdivisions, shall have adequate drainage provided to reduce exposure to flood hazards.
- (e) All subdivision proposals, including manufactured home parks and subdivisions, shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize or eliminate flood damage.

(Code 1966, § 15½-61)

Cross reference— subdivision and development regulations, app. A.

Sec. 54-94. - Areas of shallow flooding (AO/AH zones).

Located within the areas of special flood hazard established in [section 54-31](#) are areas designated as shallow flooding. These areas have special flood hazards associated with base flood depths of one to three feet where a clearly defined channel does not exist and where the path of flooding is unpredictable and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow; therefore, the following apply:

- (1) All new construction and substantial improvements of residential structures shall have the lowest floor, including basement, elevated above the highest adjacent grade at least one foot above the depth number specified in feet on the community's flood insurance rate map (at least two feet if no depth number is specified).
- (2) All new construction and substantial improvements of nonresidential structures shall:
 - a. Have the lowest floor, including basement, elevated above the highest adjacent grade at least one foot above the depth number specified in feet on the community's flood insurance rate map (at least two feet if no depth number is specified); or
 - b. Together with attendant utility and sanitary facilities, be floodproofed to at least one foot above the base flood elevation so that below the floodproofed elevation the structure is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads or effects of buoyancy.
- (3) A registered professional engineer or architect shall submit a certification to the floodplain administrator that the standards of this section, as proposed in [section 54-64](#), are satisfied.
- (4) Require within zones AH or AO adequate drainage paths around structures on slopes, to guide floodwaters around and away from proposed structures.

(Code 1966, § 15½-62; Ord. No. 22-2012, § 1, 4-17-2012)

Sec. 54-95. - Floodways.

Located within areas of special flood hazard established in [section 54-31](#) are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of floodwaters which carry debris, potential projectiles and erosion potential, the following shall apply:

- (1) Encroachments are prohibited, including fill, new construction, substantial improvements and other development unless certification by a professional registered engineer or architect is provided demonstrating that encroachments shall not result in any increase in flood levels within

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the community during the occurrence of the base flood discharge. This section shall not apply to the placement of manufactured homes in existing manufactured homes parks or subdivisions.

- (2) If subsection (1) of this section is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction sections of this division.
- (3) Under the provisions of [44 CFR chapter 1](#), section 65.12, of the National Flood Insurance Regulations, a community may permit encroachments within the adopted regulatory floodway that would result in an increase in base flood elevations, provided that the community first completes all provisions required by section 65-12. All information required to comply with section 65-12 shall be provided to the community by a professional engineer on behalf of the party requesting the encroachment into the floodway.

(Code 1966, § 15½-63; Ord. No. 15-2012, § 2, 3-20-2012)